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## U. S. DEPARTMENT OF AGRICULTURE, STATES RELATIONS SERVICE.

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## HOW TEACHERS MAY USE FARMERS' BULLETIN 729, CORN CULTURE IN THE SOUTHEASTERN STATES.

Range of use.—North Carolina, South Carolina, Georgia, Alabama, and Florida.

Relation to the course of study.—This bulletin may be used in the study of agriculture in connection with field crops in general and corn in particular. In many instances the topics lend themselves to correlation with other school subjects.

Topics.—The material of the bulletin should be grouped into four lessons for class study: (1) Preparing the land—drainage, conservation of moisture, plowing, and implements, pp. 1–3; (2) fertilization—humus, special fertilizer formulas, nitrate of soda, application of fertilizers, value of legumes, pp. 3–8; (3) planting—time, methods, implements, distribution of plants, number of plants, the stand, pp. 8–13; and (4) cultivation—reasons for, time, implements, pp. 13–16. Review—summary.

Study questions.—Topic 1: What are the usual indications of poorly drained land? What are the different methods of draining? What are galled spots? How does the application of stable manure increase their productivity? What is the average annual rainfall of the community? Is it well distributed during the growing period of corn? How may the winter and early spring rains be taken advantage of to supply moisture to the corn crop during the growing period? How does the depth of plowing practiced in the community compare with that recommended in this bulletin? What is a subsoil plow? On how many farms are subsoil plows found in the community? What types of turnplows are used in the community?

Topic 2: What are some of the benefits of humus? What crops are grown in the community that add vegetable matter to the soil? What valuable form of fertilizer adds humus to the soil? What fertilizer formulas are used in growing corn in the community? Compare them with the suggestions contained in this bulletin. Is home-mixing of fertilizers practiced? If not, why not? What is the practice with reference to fertilizing corn—is the fertilizer applied before planting or during the period of cultivation? When and why is sodium nitrate applied?

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Topic 3: Under what conditions is it desirable to bed land and plant in the water furrow? What are the advantages of planting in the water furrow? Under what conditions should corn be planted in furrows on level land? On beds? What is the practice in the community? What are the advantages of planting corn in drills? In checks? What is the practice of the community? What factors determine the number of corn plants that should stand on an acre? What are some of the conditions that affect the stand of corn? What precautions should be taken to secure a stand? What kinds of corn planters are used in the community?

Topic 4: What are the purposes of cultivating corn? What methods are employed in the early stages of the growing crop? In the later stages? What implements are used in each case? Compare the suggestions made in the bulletin with the community practice.

Illustrative material.—(1) Make collections of catalogues and pictures of farm implements with special reference to those used in preparing the land for and planting and cultivating corn. (2) If possible secure a collection of the different kinds of fertilizing materials. These collections should be placed in bottles of uniform size and labeled.

Practical exercises.—(1) The facts set forth in this bulletin should be applied on the farms, in the home, or club work of pupils. (2) The teacher should require the pupils to make reports of the practice at home as it relates to each lesson topic. These should be submitted in writing and should constitute a part of the class discussion of each topic.

Correlations.—Make a study of the farm implements of the community used in breaking land, distributing fertilizers, planting corn, and cultivating corn. Ascertain these facts: (1) The name of the implement, (2) where it was manufactured, (3) its original cost, and (4) its special use.

Compiling these facts provides written work. Locating the factories and the lines of transportation over which they were shipped gives work in geography. List the names and have pupils learn to pronounce and spell them. Finding the cost of the various implements and the total original value provides work in arithmetic.

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